



Assessing the Economic Consequences of Widening I-70 for the City of Columbia

Prepared for:



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EXECUTIVE SUMMARY

Economic Development Research Group, Inc. (EDR Group) was hired by the City of Columbia Department of Planning and Development to assess the types of economic impacts associated with the construction of MoDOT's proposed widening of I-70 (from St. Louis to Kansas City) in the city's 18-mile corridor.

The analysis coincided with MoDOT's on-going Phase II Environmental Impact Study (EIS) analysis of alternative lane, ramp, interchange, access road designs for the Columbia metro area developed by CH2MHill. The EDR Group was directed to provide guidance to the City on design-related issues prior to MoDOT's selection of preferred design. Specifically the City wanted to be in a position to assess the community impacts related to (i.) economic development implications of the frontage road options, land takings, and project completion; and (ii.) economic and tax revenue impacts of both land takings after the potential relocation of commercial tenants elsewhere in the city, and of construction-related disruptions. The study suggests strategies for the City to consider in proactively managing construction-period access disruptions so that city businesses incur minimal losses or added logistics costs over the duration of the project.

Recommendations concerning the design attributes proposed by CH2MHill for improvements to I-70 include:

- Advanced signage along the corridor to help businesses along the interstate deal with reduced interstate traveler visibility because of elevation aspects of the design.
- An appropriate¹ one-way frontage road design where no access road currently exists can preserve more taxable property than a two-way frontage or collector-distributor road.
- The potential for the free-flow modification to the I-70 /U.S.63 interchange to create a bypass of businesses located near that interchange suggests that the area may be best developed with businesses not dependent on *pass-by* traffic.
- The partial interchange improvement at Fairview, while not able to serve key commercial traffic movements from all directions with respect to I-70, may argue for a Scott's Boulevard Interchange to be added.
- Proposed lengthening of ramps, and their positions, while improving the existing concern of ramp stacking, will challenge first-time or pass-through visitors in reaching abutting traveler services. At minimum advanced signage will be needed.

¹ A combination of a "Texas" turnaround, and/or strategically placed curb-cuts.

- A one-way frontage road design through the triplet area with limited access points will grow local access, support growth of the surrounding business community, and ensure unconstrained movement of emergency vehicles. This allows the city to incrementally develop the back-street system between Providence and the new Business Loop 70 East interchange, ensures no access constraints to developable parcels on Vandiver Dr. or redevelopment of under used parcels on Business Loop 70 East. It also provides comparable performance for the controlling intersections as would a *collector-distributor* approach to the frontage road.

Estimates of key impacts associated with the probable project foot-print are as follows:

Land acquisition for the I-70 right-of-way will require the acquisition of 45 parcels of property which will result in the displacement of 51 existing businesses. Forty-six businesses will lose their buildings and five businesses will lose a significant portion of their parking areas that will render their business operations inoperable as a result. There are 873 full-time equivalent jobs, business sales estimated at \$105 million and \$25.4 million in wages tied to these 51 businesses. The affected businesses and the associated loss of jobs, sales and wages are broken out by type shown in Table ES-1.

Table ES-1: Gross Economic Impacts (in 2003 \$) from Active Commercial Structures Eliminated

Type of Business where Structures ¹ will be taken for ROW	Number of Businesses	Dislocated Jobs (FTE)	Dislocated Annual Sales	Affected Annual Wages
TOTALS	51	872.5	\$105,314,926	\$25,409,622
Auto Service	6	22.5	\$1,748,793	\$584,391
Commercial-Other	4	206.0	\$28,812,297	\$9,117,860
Construction/trades	5	76.5	\$12,807,771	\$2,719,734
Eating Establishments	4	112.0	\$3,607,301	\$1,062,950
Health Services	3	225.0	\$16,224,310	\$7,350,703
Lodging – Motels *	4	62.0	\$3,459,885	\$684,002
Retail-Other	11	78.5	\$12,238,511	\$1,355,842
Retail-Service Stations	6	32.5	\$6,962,957	\$441,391
Retail-Auto Dealers	3	40.5	\$17,745,936	\$1,645,861
Misc. Services	3	8.0	\$556,872	\$194,175
Warehousing/Distr.	2	9.0	\$1,150,293	\$252,713

¹ Includes cases where entire parking lot will be eliminated.

FTE = *full-time equivalents*.

* Does not include the 86 room Comfort Inn under construction Fall, 2004

The gross impact on city tax revenues that would have been generated from business activity and property taxes tied to parcels in the right-of-way are shown in Table ES-2.

Table ES-2: Summary of City’s Project Related Gross Loss of Annual Tax Revenue

Annual Revenue Lost Project	City of Columbia
Lost Revenue to City	
Non-Property Taxes	
	\$603,754
Sales	\$445,325
Hotel Occupancy	\$134,085
PILOTs	\$24,344
Property Taxes	
	\$ 38,382
Commercial	\$ 29,387
Residential	\$ 8,504
Farm	\$ 471
Total All Sources	\$642,116

Relocation potential for any of these businesses within the first-year is dependent on the type of customer base served and availability of appropriate sites elsewhere in Columbia. Table ES-3 shows how these 51 businesses are classified with respect to these two criteria.

Table ES-3: Classification of the 51 Displaced Businesses by Customer Base & Relocation Requirements

No.	Classification of Customer Base and Location Requirements
12	<u>Highway Access</u> : Depend on I-70 pass-by traffic for their customers and thus locations at frontage roads or highway interchanges.
10	<u>Highway Visibility</u> : Depend on a regional customer base, requiring highway visibility or signage but not necessarily direct access to pass-by traffic. (This includes 3 furniture stores that also require large parcels and clustering with other regional businesses, and 2 specialized auto parts/service businesses that typically cluster with other automobile related businesses.)
(22)	<i>(Subtotal: Businesses requiring a highway corridor location: pass-by traffic, access or visibility)</i>
23	<u>Arterial Access</u> : Businesses with a local customer base that could be relocated to any suitable parcel with access off an arterial roadway
5	<u>Auto Related Local</u> : Auto-service or auto retail establishments (not gas stations); some prefer clustering with other auto-related businesses.
1	<u>Local Other</u> : Establishment(s) requiring a specialized local labor pool and large land parcel
(29)	<i>(Subtotal: Businesses not necessarily requiring highway corridor access or visibility)</i>

Tables ES-1 and ES-2 describe aspects of the *gross* business disruptions because of the project’s right-of-way. However based on the classification of businesses shown in Table ES-3, a portion of these businesses can potentially relocate to workable locations in the City. The City’s economic risk (termed *net* impacts) is identified after the relocation of as many businesses as possible. The *net impacts* are the economic and tax revenue consequences after successful relocations elsewhere in the city have occurred. These amount to 230 jobs eliminated (out of the gross 873 jobs), tied to a reduction in business sales of \$22.3 million. The extent to which different types of I-70 corridor businesses are likely to relocate is demonstrated in Table ES-4 – which shows the net loss.

Table ES-4: Net Economic Impacts of Business Displacements

Sector	<i>Dislocated Jobs</i>	<i>Dislocated Annual Sales</i>
Auto Service	8	\$ 464,000
Commercial-Other	31	\$ 1,828,000
Construction/Trades	8	\$ 1,303,000
Eating Establishments	55	\$ 1,885,000
Health Service	0	\$ 0
Lodging	50	\$ 1,712,000
Retail – Other	40	\$ 7,513,000
Retail – Gas Service Stations	22	\$ 4,241,000
Retail –Auto Dealers	13	\$ 2,544,000
Misc. Services	2	\$ 0
Warehousing/Distribution	1	\$ 427,000
Total Expected Net Impact	230	\$ 22,303,000

Tax revenues losses from the net impacts of displacement reflect sales tax, hotel occupancy tax, and payments-in-lieu- of taxes (PILOTs) that will be foregone. Table ES-5 shows these annual impacts.

Table ES-5: Net Impact on Annual Business Sales-related Payments to the City of Columbia, in 2003\$

<i>Annual Net Revenue Lost</i>			
Sales Tax	Occupancy Tax	PILOTs	Total Revenues Lost
-\$97,972	-\$67,042 ¹	-\$5,356	-\$170,370

Annual Property tax losses to the city from the affected commercial, residential, and agricultural parcels amount to \$130,510 after businesses relocate elsewhere in the city, and 90 percent of the housing units are accommodated by current development in Columbia. These are summarized in Table ES-6.

Table ES-6: Summary of Net Loss to City's Annual Property Tax Revenue (2003 \$)

Lost Property Tax Revenue to City	\$ Annually
	-\$7,876
Commercial	-\$6,465
Residential	-\$ 850
Farm	-\$ 471

The total annual impact on tax payments to Columbia in the short-run is \$178,264 from business payments and property tax losses.

Construction-disruption risk for remaining businesses in the corridor in terms of lost sales (and jobs) is shown in Table ES-7. The set of businesses screened for each defined segment of the corridor were those in the predominant sector (e.g. services, industrial, trade) of that interchange neighborhood. At minimum 65 businesses could experience a shortfall in business activity estimated as \$90.7 million and affecting 1,223 jobs. These impacts should be interpreted as accruing over the entire phasing of the project since segments will be worked on in sequence. The majority of these impacts fall within the traveler-serving sectors (lodgings, restaurants, gas stations).

Table ES-7: Business Risk from Construction-related Disruptions

Corridor Business Zone	Identified Businesses At Risk			Total Businesses "At Risk"		
	Select Businesses Screened	# Traveler-serving	# Access-Dependent	Jobs	Annual Sales	
Stadium/Fairview Interchanges	121	6	3	9	112	\$7,745,000
Creasy Springs/West Boulevard Interchange	56	6	4	10	162	\$14,867,000
Triplet Interchanges-north	94	8	0	8	201	\$13,105,000
Triplet Interchanges-south	55	15	0	15	198	\$13,958,000
Paris Road Cross-Over	36	11	1	12	123	\$22,229,000
Interchanges 128A and 131	26	10	0	10	418	\$18,428,000
Interchanges 131 and 133	10	1	0	1	10	\$400,000
Total	398	57	8	65	1,223	\$90,732,000

These impacts can be mitigated by a proactive strategy undertaken by the City of Columbia, the Chamber of Commerce and MoDOT to provide:

- Good alternative Routes that work – not circuitous detours; this may also require interim steps of creating connections among the existing back street system;
- Good Signage in Strategic places – communicating “*Open for Business – Alternative Route Available*”; and
- Possible use of *temporary* One-Way streets.

Potential economic development opportunities as a result of the completed I-70 widening will be stimulated by:

- By providing opportunities to economically “rationalize” development of underused parcels near the highway (i.e., reconfigure buildings and uses to generate greater levels of jobs and business sales, such as along BL70 East), and increase access to those parcels;
- By reducing congestion and improving travel times on the highway, thus making the city a more desirable central Missouri location for people to visit and for industries to locate; and
- By increasing the carrying capacity of I-70 to and from Columbia, and volume of traffic flows through Columbia, sustaining and increasing the potential for economic activities that serve pass-through travelers.

The study concludes with estimates shown in Table ES-8 of potentially achievable employment growth above the 2% annual increases assumed by the Columbia Area Transportation Study Organization (CATSO) for the year 2030. To maximize the business gain from a completed I-70 project, it will be important for local business and city leaders to collaborate in development of improved sites for industrial park sites, commercial office sites and commercial retail sites. That means collaboration and/or cooperation as appropriate to:

- (a) Allow and encourage assembly of sites for larger scale and denser development of these industrial, office and retail activities;
- (b) Provide enhanced local road access to businesses off of interchanges and cross streets;
- (c) Provide attractive landscaping to enhance the quality of life appearance of Columbia and its business districts, to provide an amenity to local residents and to enhance business attraction efforts; and
- (d) Advertise the availability of Columbia’s many industrial parks, office parks and specialty retail districts and their regional accessibility features (along with other features) in venues and media that reach growing and relocating businesses.

Table ES-8: Employment Growth and I-70 Impacts (2005- 2030)

	I-70 Corridor	Route763 / Rangeline	Route B Industrial	South US-63	Central City
<u>Forecast Employment</u>					
<u>Growth (2000-2030)</u>					
<u>No. Of Employees</u>					
Retail	+ 2,453	+1,311	+437	+1399	+175
Service	+1,997	+666	+416	+998	+166
Industrial	+316	+56	+486	+372	0
Office	+1,058	+85	+741	+904	+2,269
Total 2030	+5,824	+2,118	2,080	3,673	2,610
Developable Vacant Acreage w/sewer by 2030 ¹					
	+3,588	+867	+1,653	+1,446	+265
<u>Short-Term Loss from I-70 Land Takings</u>					
Gross Emp. Loss *	-873	0	0	0	0
Net Emp. Loss **	-232	0	0	0	0
<u>Growth from I-70 Traffic & Access Improvements</u>					
Potential Employment					
Gain	+700	+ 225	+ 325	0	+80

¹Totals reflect all zoning types, not just *commercial*.

* Gross Loss is the total direct number of jobs associated with businesses whose land and buildings will be taken for the expanded I-70 highway

**Net Loss is the expected actual loss after adjusting for the fact that some businesses (particularly small scale, local-serving businesses that do not require highway visibility and direct highway access) can be expected to relocate to other available parcels in the city, if not in their local area. See separate document on land taking impact.